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RAJENDRA CHOLA'S EXPENDITION : NORTHERN CONQUEST OR ASTRONOMICAL PURSUIT?

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Rajendra Chola's Northern Expedition

Rajendra Chola's northern conquest, as described in the inscriptions and copper plates, has not been taken seriously and it is mentioned causally in few lines or paragraphs in the history books. The impact of his conquest of sojourn of the north-Indian states has not been studied critically - Orissa, Bengal and beyond. Incidentally, the contemporary kings of northern Indian states and as well as that of Greater India, had names with suffix of "Varman" typically South Indian. Therefore, these kings could have had lines with each other. About the stones / sculptures brought by the Chola kings from the north and as well as Kamboja, different interpretations have been given by the historians. They are considered as Chola, a peculiar stone gift, and so on. It has to be critically studied, as to whether the Chola kings went there just to bring those stones or stone sculptures to be fit into their temples or they had any other significance in the context.

Surya stone, Suryamandala or Navagraha Sculpture at Gangaikonda Cholapuram

First, the suramandala or Navagraha sculpture is taken up for discussion. The sculpture found has been unique as it represents nine plants with all traditional paraphernalia and with the structure resembling that of Maha-Meru starting with square at the bottom and ending with circle at the top. Bindu / dot – top portion.A circle below it.Six-petalled lotus surrounding the circle.Twelve-petalled lotus surrounding the above.Thirty six- petalled lotus surrounding the above circle. Nine planets occupying the cardinal points below the above three layers. All the above carved with a square shaped base. The above pattern could not have been mythical, accidental or mere coincidence with numbers or part of Maha-Meru structure. Historians have made some observations on the stone sculpture.

K.V. Soundara Rajan commented as follows[1]: "It is an unconventional representation of a Navagraha block from the Chola centre of Gangaikondacholapuram, in the temple built by Rajendra Chola I, son and successor of Raja Raja I, in the second quarter of the eleventh century. It was a trophy the imperial monarch brought from the Gahadavala kingdom after his victorious campaign there. It is a Suryamandala with other planets shown around the Sun god, with the full-flown lotus from the block. It is evidence of positive artistic contacts made by the kings, as part of their imperial prerogatives and aesthetic grooming. Religion had played only a secondary part in the transaction and the eye for the innovative art had been the motivation". But C. Sivaramamurti notes[2] that, "it is an eloquent testimony to the cosmopolitan spirit of Rajendra, who, after his northern conquests, combined northern and southern elements to produce this most interesting group", implying that it was carved by the Chola sculptors.

K.A.N. Sastri noted[3] it as, "Surya stone (in Kamala yantra form), west face in Mahamantapa of Brhadisvara temple, Gangaikonda-colapuram, Tiruchirapalli district", i.e., he mentioned it as "Kamala-yantra".

Therefore, a question arises as to whether the sculpture was actually brought from the north or manufactured / sculptured at Gangaikondacholapuram. In any case, it is evident that they knew it was associated with the nine planets and ancient "Yantra", a structure constructed based on tantric architecture.

Gahadavala inscription on the walls of the Gangaikondacholapuram Temple

An inscription of Kannauj / Kanoj is found at Gangaikondacholapuram inscribed in Sanskrit dated 1111 CE, the 41st regnal year of Kulotunga –I, in the temple gives the prasasti of a Gahadavala king of Kanauj. As it is fragmentary, in the sense incomplete the purpose of the inscribing is not known. Kanoj is known variously as Kanauj, Kanyagupja and so on situated NW of Kasi / Varanasi[4]. Madanapal Deva and his son Govindachandra were ruling Kanauj. One of them might have visited the temple to offer donation to the deity. Interestingly, the slokas, which are found on the copper plates issued by Govindachandra Deva, are found inscribed on the walls of the temple of Gangaikondacholapuram[5]. Therefore, it is evident that the incomplete inscription must be that of Govindachandra Deva, though the inscription does not give the name of the ruler or the nature of gift, as it is left unfinished.

Sun-worship: The Gahadavalas and the Cholas

The Kings of Kanuj were the Sun-worshippers and therefore, Kulottunga might followed them in constructing a Sun temple in Tamizhagam known as Kulottunga marthandalayam[6]. His two inscriptions are engraved in the base of the mukha mantapa[7]. Now, it is known as "Suriyanar Koil" (Sun temple) and forms the nanoid of planetary temples (Navagraha Sketras). An idol of Kasi Visalakshi is found consecrated in the Sun temple. Therefore, the relation between these two-north-south Kings could be something else than mere exchange of

stones, sculptures and idols of Gods and Goddesses or theology.

The peculiar stone as a present received from the king of Kamboja / Cambodia / Khmer

Chidambaram inscription refers to one Kamboja (Kambosha-raja) ruler who made a beautiful stone gift as a curio (katchi) to (Kulotunga) Rajendrasoladevar (i.e. Rajendra Chola) which with latter's permission, was embedded in front row of the edirambalam of the Nataraja temple[8]:

K. A. Nilakanta Sastri[9] noted that, "(according to the inscription from Cidambaram dated 13 March 1114 CE) ...Rajendra received a peculiar stone as a present from the king of Kamboja, and that he caused this stone inserted in to the wall in front of the shrine of Cidambaram" and wondered as to whether "... it is relic of the friendly connections maintained by Kulottunga with the powerful Khmer empire across the seas, on the sea-route to China". However, where the stone was inserted, what was the purpose the other details were not given.

Indian Kings affected by the Mohammedan invasions / attacks and the Chinese

Incidentally, the period 950-1150 was the struggle between the Indian rulers and the invading Arab / Mohammendan forces. The Arabs, including Mohammendans and Mongols were attacking and looting Indian cities invading from the North-western parts. The Chinese had been antagonistic towards the friendly Cholas resorting to killing the Chola ambassadors. The Arab-Chinese pirates were harassing and looting Indian merchants and ships. Suddenly, the Sri Vijaya kingdom also started acting against the Cholas.

Mohammed Ghaznavi (997-1030) son of Subkutugin[10] was defeated by Jaipal, the Jat king, but later committed suicide, when he was arrested but released on heavy ransom. Govindachandra (1085-1100) also defeated the Mohammendans first, but later got defeated as the Indian rulers divided in supporting him.

In spite of the maritime superiority of the Kadambas on the Western Indian side, they could not withstand the treacherous and ungrateful Arab traders, pirates and buccaneers. Of course, the Cholas were betrayed by the Arab merchants and the Sri Vijaya kingdom completely. Rajendra Chola could not go again to check the representative SEA trade partners. Thus, the Indian kings must have thought and decided about formation of confederacy to fight against the Arabs / Mughals.

The Astronomy of Chola Period

The shipping, navigation and astronomy go together. Rajaraja encouraged astronomy and there were colleges exclusively at important cities like Madurai, Tanjai / Thanjavur and Trichirappalli[11]. Incidentally, there was an astronomer hailing from Gagnaikondacholapuram, which is mentioned as Gangapuri, Gangapura and Sriranga-gangapuri[12] with prefix Sri-ranga (the stage of goddess of prosperity). That "Gangapuri" was so famous and popular is evident form the frequent mentioning of it in the contemporary literary works – Kalingattuparani, Vikramachola Ulah and its variances "Gangai Mahanagar" in Vira Rajendran's Meikirti, "Gangaipuram" in Dhandiyalangaram. His name was Suryadeva[13] and also known as Suryadeva Yajava, Suryadeva Somasut and Suryadeva Kikshita (c.1191-1260 CE). He was born in Monday, 3rd that of the dark half of Magha, Saka 1113 (=1191 CE). The ahargana for that day, according to Aryabhata-siddhanta was 15,68,004, i.e, so may days elapsed since Kaliyuga. So dividing 15,68,004 by 365.25, we get 4293. Subtracting 3102, we get 1191 (4293-3102=1191), this tallies with the year obtained based on Saka era 113+78=1191. He was a Brahmin with Nidhruva gotra belonging to the Chola country and a resident of Gangaikondacholapuram and thus, evidently patronized by the Chola kings. Rajendra Chola (1012-1044) founded the city to commemorate his victory over Ganges campaign. Probably, Somadeva Yajva's forefathers had been with the

Cholas and he could be the Royal Astronomer with others. This all of a sudden could not have come into existence. Referring to Post-Sangam literature, we come across Civaga Cintamani (dated to 9th -10th centuries, verse no. 995) mentioning existence of Colleges as follows: fyj;jw; fhyq; fy;Y}hp (Kalathar Kalang Kalluri)". When time comes (after primary education), the youth are admitted to college (for higher studies). Thus, the mention of fy;Y}hp is very interesting and significant to prove the well-established educational system in the Tamizhagam during 9th -10th centuries. Of course, during the Chola period, many other institutions like judiciary, democratic polity with voting, land survey, decentralization, taxation and tax reformation, hospitals and others were existing and functioning just like 10th century.

Somadeva Yajvan, the Royal astronomer and his possible role in the navigation of the Cholas

As mentioned, the forefathers of Suryadeva or their disciples must have accompanied with Rajendra during his overseas campaigns. Thus, during the Chola period, the knowledge of geography accompanied with cartography must have been there, as otherwise, Rajendra chola could not have navigated and directed his ships exactly going to the respective countries, carried the campaign by landing on the shores respective cities of the countries after anchoring. He must have used small boats to reach the shores. After campaign, he must have come back to his ship and started sailing after de-anchoring. This proves that Cholas were having maps of India accompanied with the South East countries. However, it is intriguing and surprising to note none of the maps are available or reported in possession of anybody.

Other literary evidences to show that Stellar Navigation was Practiced

Civaga Cintamani (verse no. 882) mentions about the existence of "books on the knowledge of Oceans", which is very significant in the context:

thz kjdD tz if tbE}w flwNfstj ikejh jhd kjdD tqF foyhdwidr Rokwwg GzkjdD khhgd nghyjejhqfjUejhd tjrkgjw NfhdkjdD kd #o Fsjhkhkjjj NjhwwnkhjjNj.

The brothers are having hands which are well-versed in the handling of glittering swords and as well as well written books on Oceans (The sailors of all categories – traders, businessmen, should be warriors and also good navigators with the knowledge of shipping, astronomy, geography and oceanography). As Civaga, the hero is encircled with his brothers shining, the cool Moon is also encircled with other planets and asterism (visible clearly during the night, as could be observed by them on the ship during their voyage, i.e. the knowledge of stellar navigation is also a must for them).

The astronomical link among the SEA countries and India

The Siamese[14] and Tiruvalore[15] astronomical tables created a great storm in the Europe making the mathematicians, astronomers and scientists to study them to find out the accuracy[16], as they reportedly had calculations starting from Kaliyuga that started coinciding with a planetary conjunction or alignment that occurred around 3102 BCE[17]. The movement of Cholas, particularly, Somadeva Yajvan with Rajendra to SEA countries could be a source for the spread of such knowledge. Moreover, historically, the entire area was known as "India" according to the middle-east and European people, as is evident from their writings and maps[18]. The flooding of Jesuits to Siam attacking Royal palaces[19], infiltrating temples and Buddhist Viharas and researching the scholars for astronomical, geographical and medical manuscripts speak the motive[20]. The movement of selected Jesuits from Cochin and Goa to China and back[21], SEA countries and back to Pondicherry, Tranqeubar etc., prove their collection of scientific and technical manuscripts, tables, charts and materials.

Mandala, ground plan erection of temple and architecture

The temples of Khmer and Cholas have common features of Chakra as ground plan and Meru as elevation. 1. Rajaraja Chola (985-1014) constructed the "Big Temple" with vimana of height 216 feet / 65.84 metres and was known as "Dakshina Meru". 2. Rajendra Chola (1012-1044) built Gangaikondacholapuram Temple exactly like "Big Temple", but smaller in dimensions. Garbhagraha (sanctum sanctorum), the enclosing prakara, eastern gopura in the depilated condition are only available now and all other parts / structures of the temple disappeared[22]. 3. The Gahadavalas built temples, but they were totally destroyed by the Mohammedans and therefore, no details are available about the temples but magnificent sculptures in broken condition are in the museum. 4. The Pala temples were also subjected to the same condition and 5. Surya Varman II (1113-1150) built Ankorwat temple, the biggest Vishnu temple in the world in Kamboja / Cambodia.

Therefore, in the cases of the Gahadavalas and the Palas, the features of temple architecture could not be noted as they are not available. However, from the ground plans and elevation of the existing temples of the Cholas and the Kambojas, the exhibiting features could be observed. The aerial images of the temples show typical specific geometrical pattern that could be noted and compared with "mandalas / chakras / yantras" – specific geometrical pattern formed with purpose.

The Indian and SEA Temples have common Architectural pattern

The common cosmological features of Indian and Southeast Asian temples have been pointed out by many scholars[23]. In Indian Cosmology, Temple and other architecture, Sri Chakra (two dimensions) and Maha Meru (three dimension) are taken as basic for building blocks. Cosmologically, everything, such as Universe, world, city, palace, temple etc., is compared with "Sri Chakra – Maha Meru" pattern. The city of Kanchipuram was considered as constructed according to Sri Chakra and it is figuratively mentioned as "nagareshu Kanchi" i.e. "if at all any city is called as city, it should be like Kanchi". The Chakra and Maha Meru are perfect geometrical patterns containing all fundamentals of mathematics, geometry, astronomy etc. thus, the Indian architects faithfully incorporated such feature in the temple building technology.

The Stones are yantras – Astronomical pattern

Therefore, when the Kamboja King presented a "peculiar stone", it was not just a stone, but could have been some "Chakra / yantra" sculpture just like that of "Surya stone" brought by Rajendran from Kannauj as a "Trophy". In Tamil, the word "kal" is figuratively used for ordinary stone, but also for hill, mountain and even Himalayas[24], as could be noted from the Sangam literature onwards. Not only that the Tamil kings were always fond of bringing stones from Himalayas, particularly washed in the sacred waters of Ganges, making north Indians to carry, bringing them to their southern places to chisel them into sacred images and consecrate in the temples[25]. Therefore, the "peculiar stone" gifted was not just stone, but a "Chakra / Yantra" having astronomical significance. As the Cidambaram Temple itself cosmologically represents the "Great Cosmos", it is reasonable to conclude that an important yantra was consecrated brought from Cambodia.

Therefore, to preserve the ancient knowledge of arts and sciences, these yantras / stone sculptures of astronomical significance might have been brought from those places and safely embedded in the South Indian temples. Now, in 21st century, it may be noted that even ordinary people started talking about the Navagraha temples in terms of astronomy. Not only that they have started visiting the Navagraha temples in lakhs. Thus, besides the faith, scientific temper and awareness are instilled in the minds of people of modernity.

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4. Alexander Cunningham, Ancient Geography of India, pp.430-437.
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18. The Southern China was known as 'Cochin China', as that area was totally dominated by the Kerala/ Chera merchants / mariners, In fact, the entire SEA area was marked as "INDIA" in their maps and dealt with accordingly.
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21. Doing Theology in the Context of mission: Lessons from Alexandre de Rhodes S.J for more details, see in http://eapi,admu.ph/eapr002/rhodes.htm.
22. In 1311, Malikaffur destroyed and looted many temples of Tamzhagam. The British constructed a dam at Kollidam, 3 miles north of Tirupananthal Mutt using granite stones of the temple. In fact, some of the stones contain inscriptions. Thus, it is evident iconoclasm and vandalism aided and abetted in the disappearance of the other structures of the temple.
23. Jukka O. Miettinen, Dance Images in Temples in Mianland southeast Asia, Helsinki, Netherlands, 2008, See chapter4, Angkor Wat: Dance and the Hindu-Khmer Cosmology.
24. Himalayas are mentioned as perungal (very big stone), vadaperungal (northern big stone or the big stone in the north), and so on.
25. In Silappathikaram, Ilango Adigal narrates as to how his brother brought stone, for building a temple for Kannagi, the most Chaste Woman.